

THE DONJON AT PEMBROKE CASTLE

By D. F. Renn

“IN plan [the town of Pembroke] is ridiculously like the skeleton of an ill-conditioned flounder, the Castle precinct being the head, the donjon the eye, the great south curtain its gills, the only street representing the vertebral bone and the various gardens its rays.”

So wrote J. R. Cobb in a thoughtful paper¹ on the castle that he had owned for three years, and the aptness of his analogy can be gauged from the aerial photograph (Plate I). Cobb cleared away many parasite structures and excavated buried walling at the castle, so beginning the conservation work which continues to the present day. Recently the round donjon (or great keep) has been carefully overhauled by the Ancient Monuments Division of the Ministry of Public Building and Works, and it seems an appropriate time to reconsider the importance of the Pembroke donjon in the development of military architecture.

THE HISTORY OF THE CASTLE

In 1093, the forces of Arnulf de Montgomery, the Norman Earl of Shrewsbury, penetrated south-westward through the Welsh kingdom of Deheubarth to “the land’s end” (*pen-fro*) and there established themselves in “a slender fortress of stakes and turf” on the narrow peninsula between two tidal streams, on the south shore of Milford Haven. Gerald of Windsor strengthened the fortress with a ditch and a wall, and a gateway with a lock on it, according to his grandson, Giraldus Cambrensis.² In 1138 Gilbert fitzGilbert de Clare, Lord of Gwent, was granted the Earldom of Pembroke to which his son Richard “Strongbow” added the Lordship of Leinster in 1171.³ The castle escheated to

¹ *Archaeologia Cambrensis*, 4th series, XIV (1883), pp. 196–220, 264–273.

² *Opera*, VI (Rolls Series), p. 89.

³ G. E. Cokayne, *The Complete Peerage*, X, pp. 348ff.

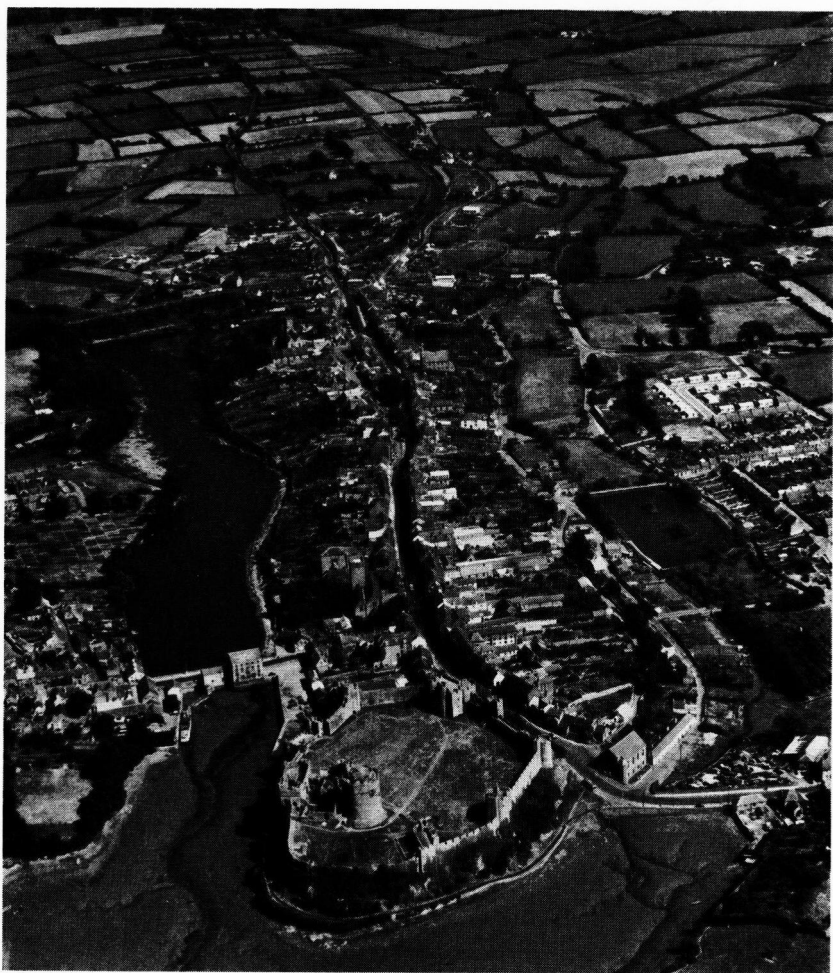


PLATE I. Pembroke from the west, looking over the castle to the town.
(*Photograph: J. K. St. Joseph (Crown Copyright Reserved)*).

the Crown in 1184-5 and small sums were spent on supplies for its garrison and repairs during the next three years.⁴ On the death of Henry II in 1189, Rhys ap Gruffyd, Lord of South Wales, invaded Pembrokeshire⁵ and in the same year Isabel, Strongbow's daughter, married William Marshal, a knight who had risen from relatively humble beginnings by his military prowess and his fearless integrity.⁶ William had spent most of his life in Normandy, and had just completed a pilgrimage to Jerusalem on behalf of the "Young King" (Henry II's eldest son, who had predeceased his father). William Marshal was soon abroad again in Richard I's service. He was in charge of the Norman treasury and the Tower of Rouen in 1199, when he was formally created Earl of Pembroke. In the same year the mill at the bridge of Pembroke Castle was granted to the Templars⁷ and two years later, in 1201, the burgesses of Pembroke received, at the earl's request, grants of toll.⁸ Next year, William Marshal was given command of Cardigan castle and in 1204 he captured the castle of Cilgerran⁹ but when he went to Leinster without King John's permission in 1207 his castles were confiscated until 1211-2.¹⁰ Meanwhile the King assembled his army at Pembroke *en route* for Ireland in June, 1210.¹¹ William Marshal died in 1219, and was succeeded by his five sons in turn until 1245, when the estates were divided up. During the thirteenth century the castle was enlarged and strengthened with a towered curtain wall and gatehouse on the landward side. It was probably in this part of the castle that the future Henry VII was born in 1457, it being the residence of his uncle Jasper Tudor, Earl of Pembroke.

⁴ *Pipe Roll*, 31 Henry II, p. 154; 33, pp. 147-8; 34, p. 165.

⁵ *Opera*, VI, p. 80; *Brut y Tywysogion*, p. 235 (both Rolls Series). For the measures taken in defence, see *Benedict of Peterborough II*, pp. 87-8 and *Pipe Roll*, 1 Richard I, pp. 130, 163.

⁶ Sidney Painter, *William Marshal* (Baltimore, 1933), especially pp. 76-81.

⁷ *Rotuli Chartarum*, p. 3; also P.R.O. Chancery Misc. Bundle 12/5 (printed in *British Academy Records of Social and Economic History*, IX, p. 142). The successor to that mill can be seen in Plate I, but has recently been demolished.

⁸ *Rotuli Chartarum*, pp. 95-98.

⁹ *Rotuli de Liberate ac de Misis et Praestitis*, pp. 27, 71; *Rotuli Litterae Clausarum*, I, pp. 54b, 68b; *Rotuli Chartarum*, p. 44; *Brut y Tywysogion*, p. 261; *Annales Cambriae*, p. 63.

¹⁰ *Rotuli Patentium*, pp. 69, 94b, 98; *Rotuli Litterae Clausarum*, I, p. 118b.

¹¹ *Rotuli de Liberate* . . . , pp. 172-8.

THE DONJON

The great tower stands just within the original ditch which cuts off the landward side of the peninsula, converting the site into a ringwork. To the north of the donjon are a block of domestic buildings of various dates including Norman, above a great natural cavern. The position can best be appreciated from the aerial photograph and plan (Plate I and Fig. 1).

The donjon (Plate II) is built of limestone rubble, not properly coursed but with a fair amount of sorting and levelling-up with thin slabs. Internally the walls rise sheer; externally there is a slight batter, accentuated by a sloping plinth and two offsets which are partly capped with chamfered freestone. The staircase spirals upward in the thickness of the wall, the inner side of each revolution opening onto a floor and the outer side being lit by a narrow rectangular loop. The staircase, doorways and embrasures have lost nearly all their dressed stonework, and the stair itself is a reconstruction of 1928. Each of the floors was supported by a main crossbeam, whose sockets or corbels survive (Fig. 2).

The basement is now entered from the outside by a passage cutting through the entrance from the inside to the foot of the staircase. The passage walls have a rebate at one point, together with a deep horizontal hole, suggesting a barred doorway, but it may be a secondary cutting through the foundations. The floor within is gravelled, but a number of square recesses in the wall suggest that a wooden floor once existed, so that there may have been a sub-basement, perhaps a rock-cut cistern like those in the donjons of Château Gaillard and Dundrum. Water is said to have been piped into the castle from springs at Monkton.¹² The present external flight of steps leading to the first-floor doorway is modern; the doorway itself has lost its dressings, but had a full-centred roll-moulded round arch until at least the middle of the 18th century.¹³ The late Sidney Toy suggested that the door was very narrow and shared its passageway with a flanking

¹² A well in the castle was mentioned during the 1648 siege: *Archaeologia Cambrensis* cited in note 1, p. 269.

¹³ Engraving by S. and N. Buck, also painting by Richard Wilson (National Museum of Wales).

arrowslit,¹⁴ but the only evidence for this is two or three stones resembling a straight jamb. Two beamholes remain above the external opening (that on the right containing the stump of a beam) and Cobb mentions two others below. They may have supported a porch (as at Skenfrith) but Toy's suggestion of a movable bridge, lifting to block the doorway, is perhaps more likely. Inside, beyond the stair opening on the right, is a fireplace, its plain jambs converging upward to a round head. At right angles to the stair opening are two small round-headed embrasures, about 24 inches wide and 40 inches high, which taper (through 12 to 15 feet of wall) to a narrow vertical slit on the outer face. There are similar loops airing—rather than lighting—the second and third floors.

Immediately over the first-floor doorway is a window (Plate II) with a pointed outer arch and plate tracery in the form of two lancet lights. The central mullion has a moulded swelling inside pierced by a hole for a shutterbar. The reveals of the lancets are chamfered off and carved with a discontinuous dog-tooth ornament. A stone projecting from the tympanum is carved with what appears to have been a human head. The window embrasure is deep but narrow, although it has stone seats along each side. Another narrow embrasure on the opposite side of the donjon leads to a tall external doorway with rounded jambs and full-centred head; a movable bridge may have stretched from this doorway to the inner curtain wall nearby. There are two loops similar to those of the first floor; the fireplace is smaller, with a basket head, and the two chimneys are linked into a square shaft continuing upward in the wall thickness.

In the wall of the second and third floors is a narrow vertical groove for a partition. The entrance to the third floor from the staircase still has traces of its splayed jambs. The outer window on the stair appears to have been larger than a mere slit, perhaps to provide a view in the direction blocked above by the staircase hood. There are also five loops similar to those of the first and second floors. The two-light window is generally similar to that of the second floor, but the lights are shorter, round-headed and

¹⁴ *Castles* (London, 1939), p. 121, reprinted in *The Castles of Great Britain* (London, 1953), p. 114.

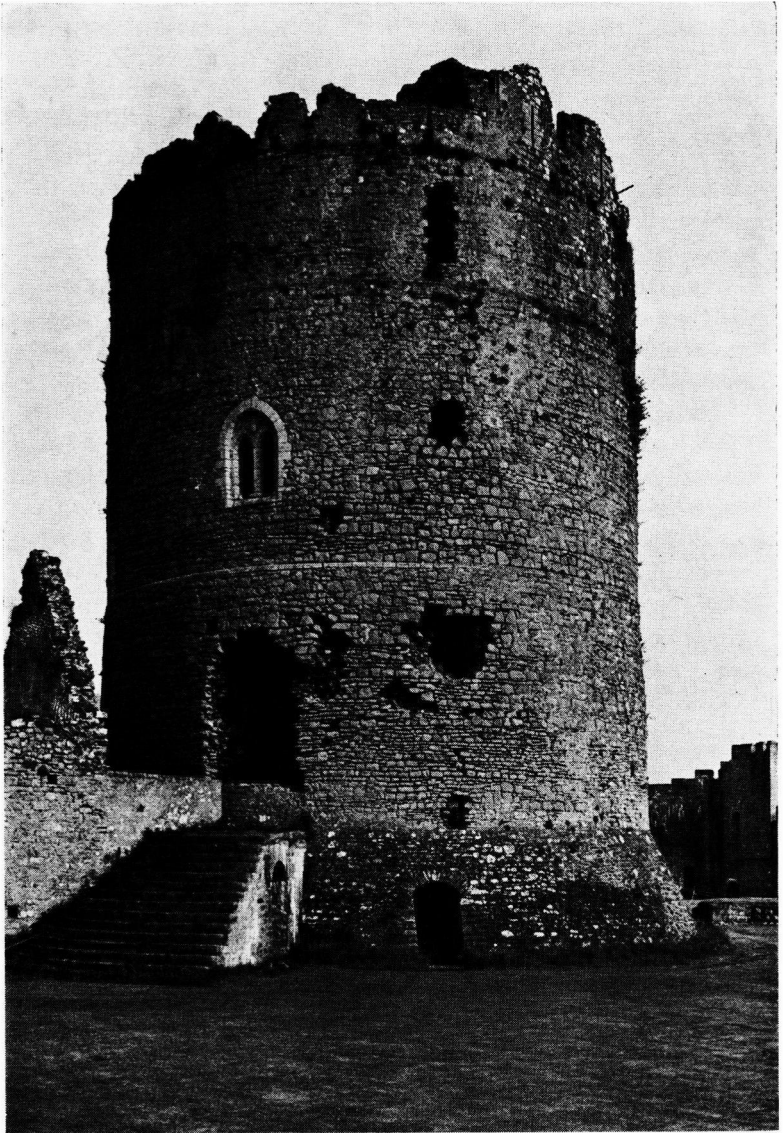


PLATE II. The *Donjon* at Pembroke from the north.
(*Photograph: National Monuments Record (Crown Copyright Reserved)*).

apparently unornamented, and the carved stone is at the apex of the tympanum.

The top of the donjon is domed over, the stone vault springing from slightly behind the inner wall-face. The spiral stair continues upwards to a doorway onto the wallwalk round the dome, where the hood over the stairhead and the chimneyshaft backing onto it block a complete circuit. Two roughly-cut horizontal shafts give access from the wallwalk to the interior of the dome; corbels near the wall-top within suggest that the hemispherical space within was floored and used as an attic or store. The wallwalk consists of radially-pitched slates forming a regular series of ridges and gutters, one to each crenellation of the parapet. The parapet was halved both in height *and thickness* at each crenel and each merlon was pierced with a lintelled arrowslit whose sill sloped downward and outward to a rectangular cross-slot. The two best preserved are those adjoining the stairhead. Below the arrowslits are small holes draining the gutters of the wallwalk and larger square holes ringing the tower, probably for an oversailing timber gallery like that round the donjon at Laval (Mayenne). On the inner side of the wallwalk is the stump of a concentric wall on the haunch of the dome. Domed vaults are not uncommon—there are two nearby, one in Bernard's Tower at the north-east corner of the town wall of Pembroke and another at Manorbier Castle.

THE DATE AND PURPOSE OF THE DONJON

The windows of the donjon at Pembroke are Transitional Norman in character; since they appear to be original and neither altered nor inserted later, this would put the building between 1150 and 1250 as outside limits. Its general proportions are similar to those of Conisbrough (Yorks.), built by 1189,¹⁵ probably for Hamelin Plantagenet, whose daughter was later married to one of William Marshal's sons. William himself must have seen many donjons during his travels as far as Asia Minor. Two may be specially mentioned: the polygonal buttressed donjon at Gisors (Eure), built for Henry II between 1161 and 1184, and the great

¹⁵ *Early Yorkshire Charters*, VIII, pp. 114-6.

prowed and machicolated one at Château Gaillard nearby built by Richard I between 1196–98. Many round keeps were built in the Brecon region from about 1190 onwards¹⁶ and the usual attribution of the Pembroke donjon to William Marshal I seems correct. The comparable donjon at Château Gaillard only took three 'seasons' to build, employing all the resources Richard could muster. Pembroke may well have taken longer. A beginning in 1189–90, after the Welsh rising, is one possibility; the alternative is a foundation in 1199, when William Marshal I became earl and seems to have interested himself more closely in Pembrokeshire and its defences. Soon afterwards, he was responsible for spending large sums on the fortification of Arques (Seine Maritime).¹⁷

The upper doorway giving access from the donjon to the top of the curtain wall occurs also at Tretower Castle in Brecknockshire, and at Dundrum Castle (Co. Down) and Nenagh Round (Co. Tipperary) in Ireland. Nenagh in some ways offers a close parallel to Pembroke, for its dimensions are very similar, although its top has been blasted off and rebuilt.¹⁸ It is also of roughly-coursed limestone and is dated *c.* 1200–06 by the most recent writers. There are, however, important differences: Nenagh Round was built astride the curtain wall of a new castle, not as an addition to an older one, and its arrowslits have large pointed embrasures. The upper floors are linked by a curved (not spiral) stair in the thickness of the wall, the fireplaces had columns to support their hoods and the windows were single lancets, those to the south with ornamental rear-arches and those to the west having side-passages to the upper doorway and to a latrine-block.

By contrast, Pembroke is downright plain. The embrasures of its loops are astonishingly small—Cobb likened them to a tin pea-shooter with the end squeezed flat. The two windows are little better and, facing north and west, could not have caught much sunlight, and the entrance also faces north. There are no sanitary arrangements, and the fireplaces are purely utilitarian. With its floors in position, it must have been a dark and cheerless place—a

¹⁶ *Archaeologia Cambrensis*, CX (1961), pp. 129–43.

¹⁷ *Miscellaneous Records of the Norman Exchequer*, 1199–1204, p. 67, cited by Painter (note 6); *Rotuli Normanniae*, pp. 23, 35.

¹⁸ *Journal of the Royal Society of Antiquaries of Ireland*, LXXVI (1936), pp. 247–69.

store and perhaps a cistern as well, but hardly a desirable residence. Yet only a few years earlier, at the end of Henry II's reign, there were built keeps like Conisbrough and Dover, with wall-chambers and every possible 12th-century convenience cunningly incorporated. Even if William Marshal was seldom at Pembroke, someone had to live in the castle all the time.

Pembroke's very plainness reminds us of the only donjon built by Richard I—admittedly in France, at Château Gaillard, which must be very close in date to Pembroke. There the masonry was ashlar, and the donjon rose in a high sloping plinth to a prowed cylinder, with deep machicolations round its beak and three widely-separated windows on the other sides. The arched stone machicolations were designed to ricochet falling missiles onto attackers. At Pembroke the machicolations were in the form of a timber gallery whose design can only be conjectured. However, the loopholes that remain in the stone parapet behind have an intricate field of fire (Figs. 2, 3). A kneeling archer on the donjon could depress his arrow up to 30° below the horizontal, and traverse a horizontal arc of 30° . The base of the cross-slot of the loop widened the traverse to 60° for that part of the field, which could be extended by changing to a standing stance, which would give a depression of up to 55° below the horizontal. Assuming that this field of fire applied all round the donjon, any point on the ground between 15 and 35 yards from its base was covered from at least three loops and most of the ground beyond, as far as arrows could reach, by two loops. The gallery's arrangements are unknown, but obviously holes in the floor could cover the otherwise dead ground around the foot of the donjon, either directly or by using the sloping plinth as a ricochet surface. The fire diagram shows that an attacker reaching the inner ward would be covered by at least four lines of fire from the top of the donjon, and explains perhaps why the donjon is sited where it is, at the expense of comfort and convenience. The inner wall on the dome has been explained as an upper fighting gallery but, unless this was very high indeed, its defenders could only have contented themselves by lobbing missiles blindly over the outer lines of defence. Alternatively, the wall with a platform right over the dome could have supported a stone-throwing engine of the mangonel or trebuchet

type,¹⁹ or perhaps a mill,²⁰ although the vibration of either might have reached dangerous proportions.

The donjon of Pembroke, then, represents an important transition in military architecture from the twelfth-century keep (primarily a fortified residential suite of rooms stacked together) to the thirteenth-century keepless castle defended from its curtain walls and with its main residence in the gatehouse, as at Harlech. Donjons were occasionally built later in the 13th century (e.g. Clifford's Tower, York) but these again reverted to the idea of a fairly convenient suite of rooms, rather than Pembroke's grim storehouse under a fighting-top.

¹⁹ Villard de Honnecourt's thirteenth-century measured drawing of the ground-frame of such an engine (*Sketchbook*, plate LVIII) has been superimposed on the plan of the dome.

²⁰ Leland (*Itinerary in Wales*, ed. L. T. Smith, London, 1930), p. 116 refers to the keep being covered by a circular millstone *in conum*.

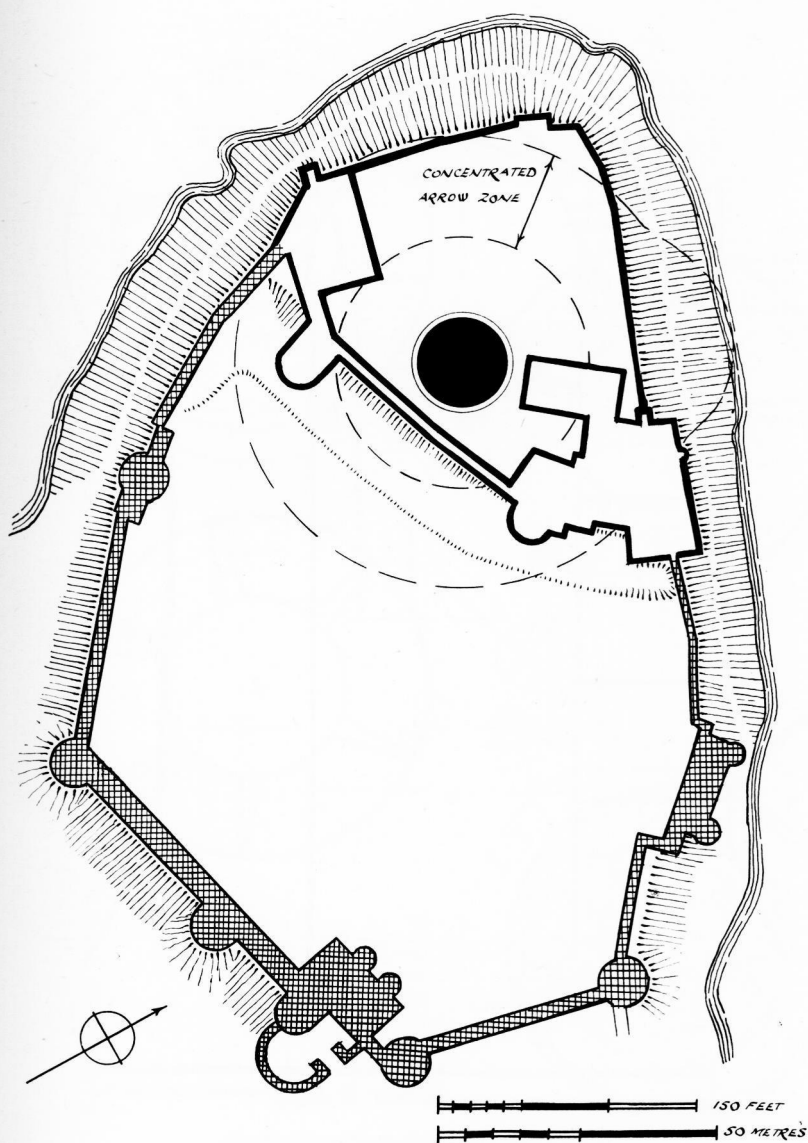


FIG. 1. Block Plan of Pembroke Castle.

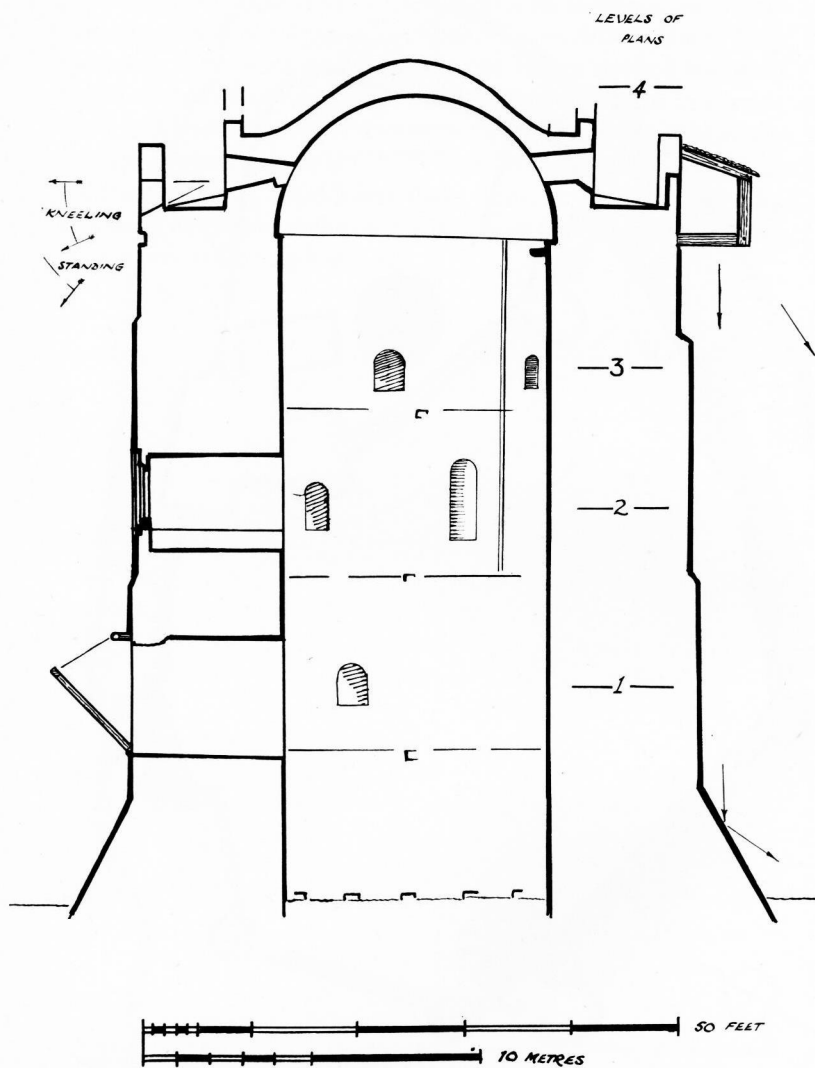


FIG. 2. Cross-section of the donjon at Pembroke.

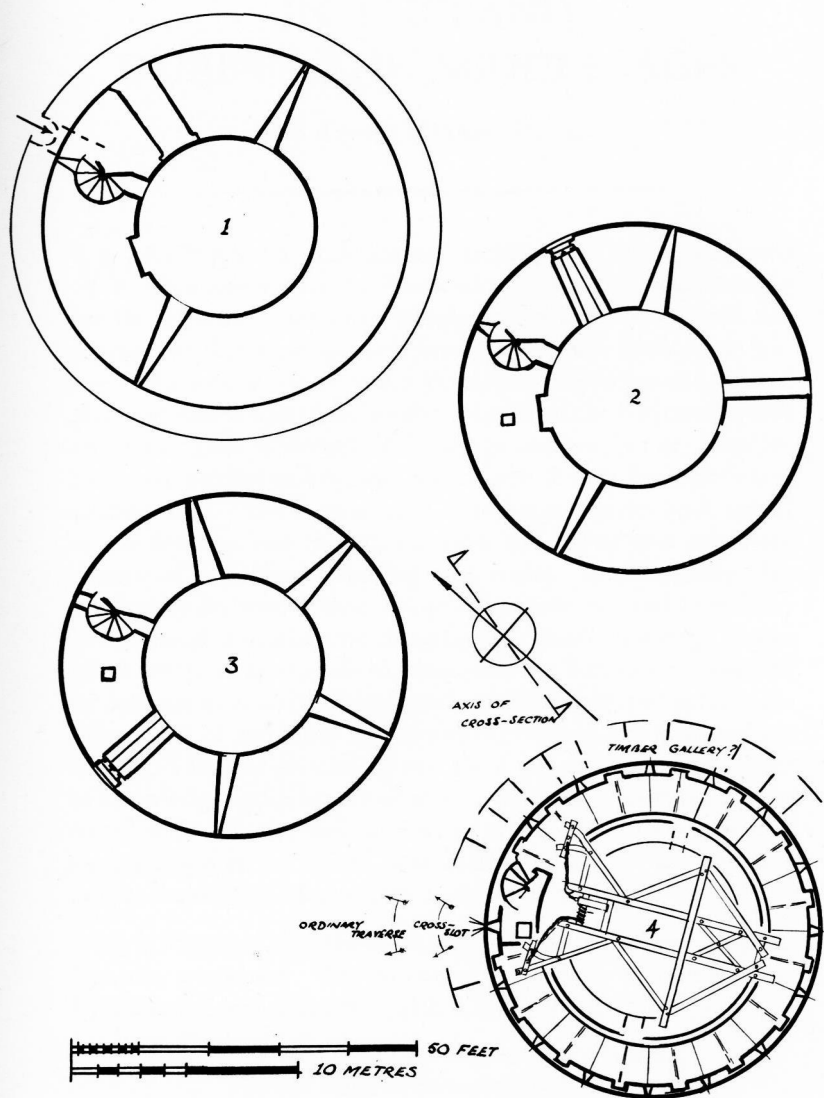


FIG. 3. Plans of the donjon at Pembroke.